

Listing of Claims

1. (Currently Amended) The staircase as recited in claim 21 wherein the horizontal glass member includes A monolithic glass member for supporting loads, comprising: a plurality of glass sheets, one of the glass sheets having a first cut out at a first end of the horizontal glass member and a second cut out at a second end of the horizontal glass member an edge thereof, and wherein the second connection member includes a connector; a first insert disposed in the first cut out of the one glass sheet and a second insert disposed in the second cut out of the one glass sheet, a portion of the connector inserts being exposed at the ends edge of the horizontal glass member, the connector inserts providing a means for coupling the second interlocking portions to the horizontal glass member connecting and supporting the glass member relative to other structures; and wherein

a bonding layer is disposed between adjacent pairs of glass sheets, the bonding layer being configured to bond the glass sheets and the connector inserts together to form a laminated structure and to provide rigidity and stiffness to the laminated structure.

2. (Currently Amended) The staircase glass member as recited in claim 1 wherein the glass sheets are annealed glass sheets.

3. (Currently Amended) The staircase glass member as recited in claim 1 wherein the bonding layer is a polymer.

4. (Currently Amended) The staircase glass member as recited in claim 1 wherein the bonding layer is Sentry Plus Ionplast Interlayer.

5. (Currently Amended) The staircase glass member as recited in claim 1 wherein the glass sheets have a low concentration of iron.

6. (Currently Amended) The staircase glass member as recited in claim 1 wherein the connector is formed from titanium.

7. (Cancelled)

8. (Currently Amended) The staircase glass member as recited in claim 17 wherein the horizontal glass member is only supported at the first and second edges ends thereof by the first and second connection members connectors.

9. (Currently Amended) The staircase glass member as recited in claim 1 wherein the horizontal glass member spans from the first edge end to the second edge end a length of between about 7 and about 8 feet

10. (Currently Amended) The staircase glass member as recited in claim 1 wherein the horizontal glass member supports loads from foot traffic of one or more persons.

11. (Cancelled)

12. (Currently Amended) The staircase glass member as recited in claim 1 wherein the glass member includes four glass sheets and three bonding layers.

13. (Currently Amended) The staircase glass member as recited in claim 1 wherein the one glass sheet includes two or more cut outs at an edge thereof the first end and two or more cutouts at the second end and further including connectors inserts disposed in each of the cut outs of the one glass sheet, a portion all of the connectors inserts being exposed at the edge ends of the horizontal glass member, the connectors and providing a means for coupling the second interlocking portions to the horizontal glass member connecting and supporting the glass member relative to other structures.

14. (Cancelled)

15. (Currently Amended) The staircase as recited in claim 17 wherein the horizontal [[A]] glass treads or riser of [[a]] the staircase, comprising: comprise a plurality of glass sheets that are bonded together via one or more Sentry Glas Plus Ionplast Interlayers to form a laminate structure, the laminate structure having a top surface, a bottom surface and an edge formed therebetween, the laminate structure being configured to be secured only at the edge and to support human loads that are applied normal to the a top surface of the laminate structure.

16. (Cancelled)
17. (Original) A staircase, comprising;
a pair of spaced apart vertical walls;
a plurality of horizontal glass treads positioned between the spaced apart vertical walls in a stepped apart relationship relative to one another, each of the glass treads having opposing ends;
a plurality of connection arrangements for fixing the opposing ends of the horizontal glass treads to the spaced apart vertical walls, each of the connection arrangements including a first connection member that is adapted to be fixed to the vertical wall and a second connection member adapted to be fixed to the end of the glass horizontal tread, the first connection member having a first interlocking portion, the second connection member having a second interlocking portion, the first and second interlocking portions being configured to engage one another so as to place the horizontal glass tread in a secure relationship relative to the vertical walls.
18. (Original) The staircase as recited in claim 17 wherein the vertical walls are formed from glass.
19. (Original) The staircase as recited in claim 18 wherein the vertical walls and horizontal glass treads are laminated glass structures.
20. (Original) The staircase as recited in claim 19 wherein the vertical walls are formed from a first laminated glass structure and wherein the horizontal glass tread is formed from a second laminated glass structure that is different than the first laminated glass structure.
21. (Original) The staircase as recited in claim 17 wherein the horizontal glass tread is a laminated glass structure, wherein the second connection member includes an insert that is disposed within the laminated glass structure at each of its opposing ends, and wherein the second interlocking portion is coupled to the insert.
22. (Currently Amended) The staircase as recited in claim 17 wherein the interlocking portions are configured to may-be disengage[[d]] from one another so as to so as to place the horizontal glass tread in a removable relationship relative to the vertical walls.

23-25. (Cancelled)

26. (Currently Amended) The apparatus of claim 24 1 wherein the inserts [[is]] are formed from titanium.

27. (Currently Amended) The apparatus of claim 23 26 wherein the first and second interlocking portions are formed from stainless steel.

28. (Cancelled)